

REQUEST FOR INFORMATION (RFI)

IN THE FORM OF WRITTEN PRESENTATION FOR DATA CENTER MIGRATION PLANNING AND RELOCATION CONSULTING

**BY THE
STATE OF TENNESSEE
Department of Finance and Administration**

RFI Number: 317.03-165-07

A. STATEMENT OF INTENT:

The State of Tennessee (State), Department of Finance and Administration, Office for Information Resources (OIR), issues this Request for Information for the purpose of the vendor to prepare a written response and oral presentation for approaches to relocate the state's current data center to two new facilities currently in the design phase. The information gained from this exercise will help the State define its understanding of the requirements for this type of engagement as the State intends to release an RFP at some point in the near future for these services. Your input is greatly appreciated.

B. BACKGROUND:

The State of Tennessee presently operates a single main Data Center and is in the process of consolidating agency servers and applications into that center. There are over 1200 applications running on an IBM mainframe, distributed Intel, and UNIX platforms (approximately 100 servers). See the chart at the end of this document for application counts and disaster recovery timeframe requirements. The applications provide services to the Agencies of State government ranging from e-mail and payroll to specific health information, to safety, child care, etc. systems. As such they vary in criticality and demand differing levels of performance and availability. The State's Metropolitan Area Network supports 15,000 users and the WAN supports 40,000 users across the State.

The need for two new data centers was confirmed in a January 2006 Gartner Inc. Business Continuity and Disaster Recovery report. The Gartner recommendations were for a dual data center solution located within a limited distance (25 – 40 miles) to facilitate the recovery of applications in the event of a disaster at one of the data centers. The existing data center is not a suitable solution due to power and building structural concerns.

The State of Tennessee intends to run the two centers in an active-active mode and to be self recovering in an emergency or disaster. An individual application may run at both centers or have production at one center and test/development at the other. Data will be replicated on Storage Area Networks at each center. In the event of an emergency an application may fail over seamlessly from one center to the other. Applications run on various platforms and have numerous dependencies and interdependencies.

To achieve a reasonable balance of disaster recovery capability and project cost, Tier III buildings, as defined by the Uptime Institute, will be used as the basis for this effort.

The state faces several obstacles in this endeavor. The first is the requirement for maximum uptime of systems and applications during the migration and relocation. The second is resources. The State's IT staff is currently faced with a number of initiatives that will limit the State's ability to dedicate full time staff to this project.

Finally, the State's IT environment has grown rapidly over the years and legacy systems and their interdependencies are in need of updated documentation. The creation of two new data centers will require full documentation of all applications and systems in preparation for a migration.

C. GENERAL INSTRUCTIONS:

The State is requesting the following information from all interested parties:

The purpose of this Request for Information is to allow Industry to demonstrate in writing and in person approaches for migrating to new data center facilities. The Proposer should try to address as many items as possible and provide the necessary supporting documentation as required.

- **We are seeking:**

- Information on the approach to migrate an enterprise organization legacy data center into two new tier III facilities with automated failover capabilities.
- Discussion of the impact of migration and implementation of data replication as the applications and or [* Tim: Something's up with the "and or" -- is it "and/or" or "and OIR"] SAN's are moved from the existing data center to the new facilities.
- Architecture strategies for cost effective automated application and hardware disaster recovery.
- How Industry untangles legacy systems and application interdependencies in preparation for a migration effort, given that documentation of State systems may be inaccurate or in some cases missing. Please provide detailed functional requirements for tools, documentation, and processes used during discovery and usage of the interface information,
- How industry avoids security access issues when determining application interdependencies.
- How industry prevents performance impact on networks when determining application interdependencies.
- How industry would staff engagements that could last several years and retain critical individuals of the project team. Please include any recommended project management or governance models. The State would like to utilize a partnering model where user groups, design, and implementation team include both contract personnel and state staff.
- Once documentation of a system/application is complete, how would industry ensure accuracy of information through migration?
- Thoughts on the time frame for major portions of the effort and state employee involvement industry would use for such a migration if outsourced.
- Suggestions on segmentation of a service engagement into several contracts vs. use of a single contract to accomplish the entire effort. Please provide pros and cons associated with a single contract vs. multiple contracts.
- What stages or phases would industry divide such an effort into and what deliverables would be anticipated in each stage or phase?
- Rough order of magnitude cost estimates for items such as application mapping and systems documentation, migration planning, migration services etc.

What do the Industry vendors see for?

- Automated Failover Technology – new technologies and their impact on network performance, reliability, and services

- Tools for managing migration planning, systems inventory, dependency mapping, etc. Please provide detailed functional specifications for each tool recommended.
- **We are not seeking:**
 - Architecture and Engineering for construction of the new data centers.
 - Please do not provide any specific pricing information. All pricing should be referenced in the form of ranges. Prices may be per unit. (i.e. per rack, per application, per square-foot, etc.)
- **Assumptions:**
 - All written responses will be reviewed by State employee stakeholders.
- **Definition or terms:**
 - Migration Planning = Documentation and planning as well as mapping of existing applications and systems to equipment in new data centers.
 - Relocation services = Documentation and planning of equipment to be moved to the new data center as well as the actual moving of the equipment.

D. INSTRUCTIONS FOR RESPONDING

- D.1. Please include cost or pricing in the form of ranges, NOT specific line items.
- D.2 All responses must be submitted in writing or by email to Sam Dunn at the address below by May 8th 2007. A vendor must submit a written response to be eligible to schedule an oral presentation.

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 ASSISTANT DEPUTY CIO
 State of Tennessee
 Department of Finance & Administration
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Sam.Dunn@state.tn.us

Address
 William R. Snodgrass Building
 Tennessee Tower 16th floor
 312 Eighth Avenue North
 Nashville, TN 37243-0551

- D.2.A Oral presentation must be scheduled with the RFI coordinator Lien Nguyen at 615-253-4849, (Lien.Nguyen@state.tn.us) from May 21st through May 25th. There will be 10 timeslots available to schedule, and each vendor may schedule no more than one timeslot. A morning and afternoon session will be available each of the 5 days. If you have any questions, please contact the RFI coordinator.

D.3 Time Line for RFI process

RFI Data Center Migration Key Dates		
RFI Release to public	Tue 4/24/07	
Written responses due	Fri 5/18/07	
Scheduling of oral presentations	Mon 5/21/07	Fri 5/25/07
Oral presentations	Mon 6/4/07	Fri 6/8/07

Additional Information on applications and platforms.

Office for Information Resources

Applications Information

	Intel	Linux	Mainframe	Unix	Other	Bull	Totals
Level 1	6	0	2	1	2	0	11
Level 2	335	0	39	24	1	5	404
Level 3	180	1	31	43	18	2	275
Level 4	258	0	41	16	17	0	332
Level 5	133	0	26	6	14	0	179
							1201

Disaster recovery requirements as defined in State's Business Impact Analysis initiative:

Level 1 = Less than 1 minute time to recover

Level 2 = Less than 8 hours time to recover

Level 3 = Less than 48 hours time to recover

Level 4 = Less than 72 hours time to recover

Level 5 = Best Efforts recovery

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